IN THE CLAIMS:

1. (Original) Device for cooling power electronics (9), comprising a support plate (21) on which the power electronics are mounted, characterised in that it comprises a circuit (22) for cooling by circulation of a liquid, mounted under the support plate.

2. (Original) Cooling device according to claim 1, characterised in that the cooling circuit comprises a liquid inlet channel (29), a liquid outlet channel (30) and channels (28) for the circulation of the liquid between the inlet channel and the outlet channel.

3. (Original) Cooling device according to claim 2, characterised in that the cooling circuit comprises deflectors (31) situated in the liquid circulation channels.

4. (Currently amended) Cooling device according to claim 2 [[~~or 3~~]], characterised in that the cooling circuit comprises turbulators (32) distributed in the liquid circulation channels.

5. (Original) Cooling device according to claim 2, characterised in that the channels of the cooling circuit are produced by pressing a first metal plate (23).

6. (Original) Cooling device according to claim 1, characterised in that the cooling circuit is fixed under the support plate by brazing.

7. (Original) Cooling device according to claim 5, characterised in that the cooling circuit comprises at least one second intermediate metal plate (24) fixed between the support plate (21) and the first pressed metal plate (23).

8. (Original) Cooling device according to claim 7, characterised in that the second metal plate is flat, brazed to the first pressed metal plate (21).

9. (Original) Cooling device according to claim 1, characterised in that it comprises a metal manifold (27) connected to the cooling circuit.

10. (Original) Cooling device according to claim 5, characterised in that the metal is aluminium.

11. (Currently amended) Cooling device according to claim 6 [[~~or 10~~]], characterised in that it comprises at least one plate comprising a plating by co-lamination.

12. (Original) Cooling device according to claim 5, characterised in that the pressed plate (23) is fixed directly by brazing under the support plate (21).

13. (Original) Cooling device according to claim 12, characterised in that the pressed plate (23) or the support plate (21) is a plate comprising plating by co-lamination.

14. (Currently amended) Cooling device according to the preceding claim, characterised in that the plates are made from aluminium.

15. (Original) Cooling device according to claim 12, characterised in that the support plate (21) carries the manifolds.

16. (Original) Method of manufacturing a power electronics cooling device, characterised in that it comprises the following operations:

- producing a cooling circuit (22) by pressing a first metal plate (23),

- brazing the cooling circuit on a support plate (21) for the power electronics (9),

- brazing, on the cooling circuit, an inlet and outlet manifold (27) for a cooling liquid.

17. (Original) Method according to claim 16, characterised in that the production of the cooling circuit comprises an operation of brazing the first plate (23) under a second intermediate metal (24) and brazing the second plate (24) under the support plate (21).

18. (Currently amended) Method according to claim 16 [[~~or 17~~]], characterised in that the pressing of the first metal plate (23) comprises the pressing of circulation channels (28) and/or deflectors (31) and/or turbulators (32).

19. (Currently amended) Alternator or alternator/starter for a motor vehicle, characterised in that it comprises a power electronics cooling device according to ~~any one of the preceding claims~~ claim 1.

20. (New) Cooling device according to claim 3, characterised in that the cooling circuit comprises turbulators (32) distributed in the liquid circulation channels.

21. (New) Cooling device according to claim 10, characterised in that it comprises at least one plate comprising a plating by co-lamination.